



PHYSICS >> Waves

Q 1 The waves which propagate by the oscillation of material particles are called:

A matter waves

B mechanical waves

C electromagnetic waves

D microwaves

Previous Question

Next Question

Q 2

_____ are such nuclei of an element that have the same atomic number Z , but have different mass number A

A isotopes

B isobars

C isomers

D isotherms

1

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 3

What are the units of the ratio: specific latent heat of vaporization of water -----
----- specific heat capacity of water

A K

B 1 ---- K

C K^2

D no unit

2

SKIPPED QUESTIONS 

< Previous Question

Next Question >

Q 4 Which particle has dual nature?

A photon

B alpha

C electron

D all of these

3

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 5 The electron volt is the unit of:....

A electric current

B electric potential

C electric energy

D electric flux

4

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 6

The process of converting alternating current to direct current is called

A

modulation

B

amplification

C

oscillation

D

rectification

5

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 7

Lorentz force can be represented as

A

$$q[E + (v \times B)]$$

B

$$q[E + vB \cos\theta]$$

C

both

D

none of these

6

SKIPPED QUESTIONS 

< Previous Question

Next Question >

Q 8 Under the action of the restoring force:

A the speed of the body always increases

B the body moves at constant speed

C the body always slows down

D the body accelerates

7

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 9 β - decay means emission of electron from

A radioactive nucleus

B innermost electron orbit

C a stable nucleus

D outer most electron orbit

8

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 10

The mutual induction happens in

A

AC generator

B

DC generator

C

Battery

D

Transformer

9

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 11

In parallel voltage remains?

A

Same

B

Different

C

Both of them

D

None of them

10

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 12

The SI unit of angular acceleration is:

A

 rad/s^2

B

 rad/s

C

 rad.s

D

 rad.s^2

11

SKIPPED QUESTIONS  Previous QuestionNext Question 

Q 13

Mass and energy are related to each other by

A

Newton's law

B

Einstein law

C

Coulomb law

D

all of these

12

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 14

The ratio of the angular speed of the minute hand of a clock to that of its hour hand is

A

3600:1

B

60:1

C

24:1

D

12:1

13

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 15

The output voltage of a rectifier is

A

smooth

B

pulsating

C

perfectly direct

D

alternating

14

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 16

220V, 50 Hz AC supply is connected across a resistor of 50 k ohms. The current at time t Seconds, assuming that it is zero at $t = 0$, is

A $4.4 \sin(314t)$ mA

B $4.4 \sin(157t)$ mA

C $6.2 \sin(314t)$ mA

D $6.2 \sin(157t)$ mA

15

SKIPPED QUESTIONS 

< Previous Question

Next Question >

Q 17

The quarks are fundamental particles

A

true in some cases

B

only spin up quarks

C

only spin down quarks

D

FALSE

16

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 18

A heat engine performs 100 J of work and at the same time rejects 400 J of heat energy to the cold reservoirs. What is the efficiency of the engine?

A 20%

B 25%

C 4%

D 50 %

17

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 19 Find the magnetic force when a charge 3.5C with flux density of 4 units is having a velocity of 2m/s

A 14

B 28

C 7

D 32

18

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 20

Radiation exchange occurs in which medium

A

solid

B

liquid

C

gas

D

vacuum

19

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 21 Resistivity of a conductor depends upon

A temperature

B length

C cross sectional area

D None of these

20

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 22 Which of the following substances cannot be emitted by radioactive substances during their decay?

A proton

B neutrinos

C helium nuclei

D electrons

21

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 23

Consider a displacement-time graph of an object moving along x-axis. Then negative gradient of the graph represents:...

- A velocity in x-direction
- B velocity in negative x-direction
- C acceleration in x-direction
- D acceleration in negative x-direction

22

SKIPPED QUESTIONS 

< Previous Question

Next Question >

Q 24

As a result of interference, energy

A

is transmitted and reflected

B

is lost

C

remains unchanged as a whole but is redistributed

D

is gained

23

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 25

The SI unit of angular momentum is Js. It can also be expressed as:

A

 kg ms^{-1}

B

 $\text{kgm}^2\text{s}^{-1}$

C

 $\text{kgm}^2\text{s}^{-2}$

D

 $\text{kgm}^{-2}\text{s}^{-1}$

24

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 26

The electric potential at a point in an electric field can be defined as:...

- A work done in bringing a unit positive charge from infinity to that point
- B work done in bringing a unit positive charge from infinity to that point while keeping the charge in equilibrium.
- C work done in bringing a unit negative charge from infinity to that point while keeping the charge in equilibrium.
- D work done in bringing a unit negative charge from infinity to that point

25

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 27

The convection process transfer heat faster than radiation

A

it depends on condition

B

not always

C

TRUE

D

FALSE

26

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 28 In step up transformer _____ is increased in secondary coils

A electric field

B magnetic field

C number of turns

D none of these

27

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 29

For a linear relationship between displacement and time we get d-t graph as

A straight line passing through origin

B straight line parallel to t- axis

C quadratic relationship

D cubic relationship

28

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 30

A force of $F = 20 + 10y$ N is acting in y direction, work done by this force to move the particle from $y = 0$ to $y = 1$ m

A 20 J

B 15 J

C 5 J

D 25 J

29

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 31 A full wave rectifier passes _____ into positive cycles

A lower half cycle

B upper half cycle

C both cycles

D none of them

30

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 32

Why should a resistance be introduced in a circuit in series deliberately?

A

To increase current

B

To decrease current

C

To control current

D

Just to give a good look to the circuit

31

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 33

A charge is moving with velocity v , it enters a uniform electric field E . The direction of v and E are not parallel. What is the path of the charge particle inside the electric field?

A parabolic

B circular

C parallel to v

D parallel to E

32

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 34 Which principle is used in solar cells?

A momentum

B charge

C mass

D all of these

33

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 35

If one body is at rest then if we try to move it then it will resist by

A

inertia of motion

B

inertia of rest

C

inertia of turning

D

inertia of acceleration

34

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 36 Force on a moving charge in a uniform magnetic field will be maximum, when angle between v and B is

A 0

B 30

C 60

D 90

35

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 37

A wave is produced by

A

Disturbance

B

Heating

C

Freezing

D

Clapping

36

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 38

In a bridge type full wave rectifier, if V_m is the peak voltage across the secondary of the transformer, the maximum voltage coming across each reverse biased diode is

A V_m B $V_m/\sqrt{2}$ C $2V_m$ D $V_m/3$

37

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 39

Which light photon has the least momentum

A

red

B

green

C

yellow

D

blue

38

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 40

How many curies are there in 10^{10} Bq?

A

0.17 Ci

B

0.37 Ci

C

0.27 Ci

D

0.7 Ci

39

SKIPPED QUESTIONS  Previous QuestionNext Question 

Q 41 The insulation between sheets of transformer core is to get small

A hysteresis loop

B eddy current

C both

D none of these

40

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 42

The speed of waves depends upon the:

A

tension of the string

B

tension and mass per unit length of the string

C

diameter of the string

D

mass per unit length of the string

41

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 43

Superposition of two waves having slightly different frequency, same amplitude and travelling in the same direction, is called:

A interference

B diffraction

C beats

D stationary waves

42

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 44

The K.E. of a body of mass 2kg and momentum of 2Ns is :

A

1J

B

2J

C

3J

D

4J

43

SKIPPED QUESTIONS 

< Previous Question

Next Question >

Q 45 _____ time is required for all the atoms to decay

A finite

B infinite

C very short

D zero

44

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 46

Correct form of ohm's law

A

$$I = VR$$

B

$$V \propto I$$

C

$$V = IR$$

D

Both B and C

45

SKIPPED QUESTIONS  Previous QuestionNext Question 

Q 47

4000 Coulomb charges were passing from the wire for about 12 seconds. Estimate the current during this process?

A 333.3 ampere

B 333.33 volts

C 666.67 ampere

D None of them

46

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 48 Motional emf can be produced with

A changing magnetic field in space

B Changing magnetic field in time

C Changing flux with space

D Constant magnetic field

47

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 49

Consider two capacitors with capacitance $2\mu\text{F}$ and $4\mu\text{F}$. With which type of connection will the $4\mu\text{F}$ capacitor have a greater amount of stored energy than the $2\mu\text{F}$ capacitor?

A series

B parallel

C either series nor parallel

D neither series nor parallel

48

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 50

A heater is used for 5 minutes to heat 500 g of water from 20°C to 50°C. What is the power of heater? Specific heat capacity of water is 4.2 J/g°C.

A 1260 W

B 12.6 kW

C 210 kW

D 12.6 W

49

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 51

Radioactive material decays by simultaneous emission of two particles with respective half-lives 1620 and 810 years. The time, in years, after which one-fourth of the material remains?

A 1080

B 2430

C 3240

D 4860

50

SKIPPED QUESTIONS 

< Previous Question

Next Question >

Q 52

A particle of mass 10 kg is moving with velocity $10(x)^{1/2}$, here x is displacement. The work done by net force during the displacement of particle from $x=4$ to $x=9$

A 1250 J

B 1000J

C 3500J

D 2500 J

51

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 53

Resistivity of a wire is ____ ohm-m if 0.75 A current flows through it by applying 1.5 V potential difference, take length and cross section as 5m and $2.5 \times 10^{-7} \text{ m}^2$.

A 1×10^{-7} B 2.63×10^{-8} C 19×10^{-8} D 7.85×10^{-8}

52

SKIPPED QUESTIONS 

< Previous Question

Next Question >

Q 54

A stationary wave is formed in a pipe which is open at one end. If two complete loops are formed and the wavelength of the wave is 10 cm, what is the length of the pipe?

A 10 cm

B 15 cm

C 12.5 cm

D 7.5 cm

53

SKIPPED QUESTIONS 

< Previous Question

Next Question >

Q 55

The control rods in nuclear reactor controls the reaction by

A reducing the neutron speed

B increasing the neutrons speed

C increasing the electron speed

D decreasing the electron speed

54

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 56

e/m ratio for a electron in electric and magnetic field is

A

$$e/m = B^2 r/E$$

B

$$E/(B^2 r)$$

C

$$E^2/rB^2$$

D

$$B^2/Er$$

55

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 57

The radius of Bohr's atom depends on the following

A

$$1/n$$

B

$$n^2$$

C

$$1/n^2$$

D

$$n$$

56

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 58

What is the S.I. unit of pressure?

A

 Nm^{-2}

B

 Nm^2

C

mm of Hg

D

atm

57

SKIPPED QUESTIONS  Previous QuestionNext Question 

Q 59

Compounds attracted by applied strong magnetic field are called

A

Diamagnetic

B

Paramagnetic

C

Good conductor

D

Ferromagnetic

58

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 60 The concept of _____ of gases helps to relate solids and liquids in a quantitative manner.

A density

B molar volume

C pressure

D temperature

59

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 61 Which of the carboxylic acid in diluted form is used as vinegar?

A Formic acid

B acetic acid

C benzoic acid

D amino acid

60

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 62

Give IUPAC name of following compound Tert-Butanol

A

3 - methyl-2-propanol

B

3-methyl-1-propanol

C

2-hydroxy-1-propanol

D

2-methyl-2-propanol

61

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 63

Which type of organic compounds are present in natural gas?

A

High molecular mass

B

Low molecular mass

C

Low boiling point

D

Both b and c

62

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 64

The group which leaves from the substrate in a nucleophilic substitution reaction is called as ____?

A Leaving group

B Electrophile

C Substrate

D Weak nucleophile

63

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 65 A reaction with a tendency of occurring in forward and backward direction simultaneously is termed as

A Irreversible

B Unidirectional

C Multidirectional

D Reversible

64

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 66

Which of the following forces have no relation with valence electrons?

A

Ionic Bond

B

Chemical bond

C

Intermolecular forces

D

Intramolecular forces

65

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 67

Specific Rate constant is also known as

A

Time Constant

B

relative rate constant

C

Instantaneous rate constant

D

velocity constant

66

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 68

The number of atoms present in a molecule determines its

A shape

B size

C molecularity

D atomicity

67

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 69

The turbid liquid were also called liquid crystals due to presence of some degree of

A heat

B order

C hotness

D coldness

68

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 70

In aldol condensation, nucleophile is_____?

A

Hydroxyl ion

B

Carbocation

C

Carbanion

D

Water

69

SKIPPED QUESTIONS 

< Previous Question

Next Question >

Q 71

Which one of the following is not the property of a system?

A

Enthalpy

B

Internal energy

C

Thermal energy

D

Temperature

70

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 72

Each electron in an atom must have its own unique set of quantum number is a statement of _____

A Aufbau principle

B Pauli exclusion principle

C Hund's rule

D none of these

71

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 73

cooling is caused by

A

vapor pressure

B

evaporation

C

freezing

D

none of these

72

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 74

Law of conservation of energy is actually

A

Second law of thermodynamics

B

Third Law of Thermodynamics

C

First Law of Thermodynamics

D

Zeroth law of Thermodynamics

73

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 75

Chloride ion in NaCl are placed at the corner of regular

A

Pentagon

B

Cuboid

C

Octahedron

D

Cube

74

SKIPPED QUESTIONS  Previous QuestionNext Question 

Q 76

According to Le chatelier's Principle Exothermic reactions are favored by

A

Increase in Pressure

B

Increase in Volume

C

decrease in Temperature

D

All of these

75

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 77

Physical methods of finding the rate of reaction always involve

A

A catalyst

B

A graph

C

A calculating software

D

None of These

76

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 78

In a carboxylic acid dimer, how many oxygens are present in the ring?

A 4

B 2

C 3

D 5

77

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 79

The specie which is in search of Positive charge is called as _____?

A

Electrophile

B

Nucleophilic

C

Nucleophile

D

Cation

78

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 80

Regular coiling & twisting of polypeptide chain caused by H-bonding in between NH & CO occurs in _____.

A Primary structure

B Secondary structure

C Tertiary structure

D Quaternary structure

79

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 81

In Electrochemical Cells Reduction takes place at

A

Anode

B

Cathode

C

At the surface of electrolyte

D

None of these

80

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 82

If Ammonia is not withdrawn continuously from equilibrium mixture its yield will be

A

increased

B

decreased

C

remain unchanged

D

None of these

81

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 83

There is one lone pair present in H_3O^+ , it cannot act as _____?

A

Electrophile

B

Lewis acid

C

Nucleophile

D

Strong acid

82

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 84

Redox Reaction are actually transfer of

A

Electrons

B

Charges

C

Energy

D

Hydrogen Ions

83

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 85

The covalent radius of an element is ___ of the single bond length b/w two similar atoms covalently bonded in a molecule

A one third

B one fourth

C half

D quarter

84

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 86

Which of the following is called as refined form of mineral oil?

A

Coal tar

B

Petroleum

C

Crude oil

D

Kerosine oil

85

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 87

The rate of reaction for the hydrolysis of ester is

A

High

B

Low

C

Moderate

D

Zero

86

SKIPPED QUESTIONS  Previous QuestionNext Question 

Q 88

Which of the following derivative of carboxylic acid is used as flavoring agent ?

A

Acid halides

B

Acid carbonyls

C

Esters

D

Acid amides

87

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 89

When we react an active metal like Al with less active element like Cu ,it will form

A

Dry cell

B

Galvanic cell

C

Electrolytic cell

D

A and B

88

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 90

Which one of the following substances conduct electricity by the movement of ions?

A

Graphite

B

Copper

C

Molten sodium chloride

D

Mercury

89

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 91 In acid catalyzed nucleophilic addition reactions, which of the following property of carbonyl system enhance ?

A Electrophilicity

B Nucleophilicity

C Basicity

D Acidity

90

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 92 Acetic acid can be used in_____?

A In synthesizing pickles

B In paints

C In pesticides

D all of these

91

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 93

In Al_2S_3 , the valency of Al is

A

2

B

3

C

-3

D

-2

92

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 94 Shielding Effect increases_____?

A Down the Group

B Along period

C Diagonally

D only along d -block

93

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 95

Temperature and volume in an experiment are part of

A

Surroundings

B

System

C

State of a system

D

All of these

94

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 96

Metals have ionization energy value

A

Low

B

high

C

intermediate

D

neutral

95

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 97

For the study of particles, discharge tube is filled with

A

gas

B

air

C

vapours of a substance

D

all of these

96

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 98

Which of the following product is obtained from the Chlorination of acetylene?

A

1,2,3,4-tetrachloroethylene

B

1,1,2,2-tetrachloroethylene

C

1,1,2,2-Tetrachloroethane

D

1,2,3,4-Tetrachloroethylene

97

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 99

What is IUPAC name of isopropyl alcohol

A

2 - propanol

B

1 - propanol

C

2 - ethanol

D

2 - propane-1-ol

98

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 100

Which of the following is directional bond?

A

Ionic bond

B

Metallic bond

C

H-bond

D

None of these

99

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 101

It consist of discrete molecules

A

sodium chloride

B

dry ice

C

copper

D

 CaCl_2

100

SKIPPED QUESTIONS  Previous QuestionNext Question 

Q 102

In sp^2 hybridization the orbital orientation is:

A

109.5°

B

180°

C

90°

D

120°

101

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 103

Quantum number values for 2p orbitals are

A

 $n = 2, l = 1$

B

 $n = 1, l = 2$

C

 $n = 1, l =$

D

 $n = 2, l =$

102

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 104

Which of the following is succinic acid ?

A

Ethanoic acid

B

Hexanedioic acid

C

Butanedioic acid

D

Propanoic acid

103

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 105

What is the value of universal gas constant in S.I. units?

A

 $8.314 \text{ J mol}^{-1} \text{ K}^{-1}$

B

 $8.314 \text{ dm}^3 \text{ atm mol}^{-1} \text{ K}^{-1}$

C

 $0.0821 \text{ dm}^3 \text{ atm mol}^{-1} \text{ K}^{-1}$

D

 $0.0821 \text{ J mol}^{-1} \text{ K}^{-1}$

104

SKIPPED QUESTIONS  Previous QuestionNext Question 

Q 106

The element caesium bears resemblance with

A

Ca

B

Cr

C

Both of the above

D

None of the above

105

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 107

Which of the following has more evaporation rate at same temperature?

A Gasoline

B Water

C Honey

D Ethanol

106

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 108 What is the value of enthalpy of neutralization when one mole of base reacts with one mole of acid?

A - 60.5 kJ/mol

B -46.5kJ/mol

C -70.5 kJ/mol

D -57.4kJ/mol

107

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 109

In organic chemistry, we deal with

A

carbon

B

Hydrogen

C

Hydrocarbons

D

potassium

108

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 110

In one second if the concentration changes from 0.1 to 0.25 then the rate will be

A

0.02 Moles/dm³s⁻¹

B

0.03 Moles/dm³s⁻¹

C

0.15 Moles/dm³s⁻¹

D

0.11 Moles/dm³s⁻¹

109

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 111

The catalyst in the formation of ester from alcohol and a weak acid is

A

A base

B

Palladium

C

Nickel

D

A mineral Acid

110

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 112

The _study of composition of pure substance in 17th century clearly shows that few elements are components of many substances

A qualitative

B quantitative

C both A & B

D extensive

111

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 113

The word Archaeobacteria is derived from a Greek word which means?

A

true bacteria

B

ancient bacteria

C

false bacteria

D

both a and b

112

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 114 The lock and key model of enzyme action was proposed by:

A Louis Pasteur

B Emil Fischer

C Daniel Koshland

D Urey Miller

113

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 115 When cocaine is used as a stimulant, it interferes with the CNS at the reuptake of which hormone?

A testosterone

B dopamine

C serotonin

D adrenaline

114

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 116 Bond specificity of an enzyme is also known as?

A relative specificity

B size specificity

C group specificity

D none of these

115

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 117

Which of the following statement is incorrect about Glyoxysomes?

- A They contain enzymes which help in conversion of fatty acids into carbohydrate
- B They are abundant in soybeans but absent in pea.
- C They are single membranous organelles
- D They are present throughout life of a plant and provide them with energy through Glyoxylate cycle.

116

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 118

The fate of each blastomere is foretold. What will that cleavage be?

A

Spiral and indeterminate

B

Radial and indeterminate

C

Radial and indeterminate

D

Spiral and determinate

117

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 119

The phage that is involved in the lysogenic cycle of a bacteriophage is known as?

A

Lytic Phage

B

Lysogenic phage

C

Prophage

D

Bacteriophage

118

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 120

Genetic diversity indicates which of the following?

A

large gene pool

B

small gene pool

C

moderate gene pool

D

no gene pool

119

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 121

Which of the the following which one is non-cellular in most cases in animals?

A

Chlorenchyma

B

Mesoderm

C

Sclerenchyma

D

Mesenchyme

120

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 122

In all plants the major sites of photosynthesis are?

A

Leaf

B

Stems

C

Roots

D

Branches

121

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 123

If an individual does not reproduce then it's degree of fitness is?

A 100

B 50

C 40

D 0

122

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 124 Which of these is not involved in respiration?

A lungs

B trachea

C glucagon

D bronchi

123

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 125

The inflammation of bronchi or bronchioles is known as

A

emphysema

B

asthma

C

pneumonia

D

bronchitis

124

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 126

Centrioles are composed of how many triplets of microtubules?

A

6

B

9

C

12

D

15

125

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 127

Urethra and vagina have -----openings to the exterior:

A

common

B

independent

C

Both A and B

D

None of these

126

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 128

Which of the light is mainly absorbed by the plants?

A

Orange

B

Red

C

Green

D

Both A and B

127

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 129

The term that should be last in the reflex sequence is:

A

Receptor

B

Effector

C

Sensory neuron

D

Motor neuron

128

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 130

What is Hepatitis D also known as?

A

Serum hepatitis

B

Infectious hepatitis

C

Bacterial hepatitis

D

Delta hepatitis

129

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 131

The neurons that interpret and receive information and stimulate motor neurons are what type of neurons?

A sensory neurons

B motor neurons

C interneurons

D rotator neurons

130

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 132

Which type of bacterial genetic recombination involves the use of a viral vector?

A

transduction

B

transformation

C

binary fission

D

conjugation

131

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 133

A fluid in transit between interstitial fluid and the blood is:

A

Synovial fluid

B

Semen

C

Amniotic fluid

D

Lymph

132

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 134

Which of the following is not a tenet of the Cell Theory?

A

Cells carry genetic information in the form of DNA

B

Cells are the basic functional unit of life

C

Cells arise from pre-existing cells

D

All cells have membrane-bound organelles

133

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 135

What energy rich organic compound is produced as a result of the Calvin cycle?

A

NADPH

B

CO₂

C

ATP

D

glucose

134

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 136

Phenotype represents which of the following?

A

morphology

B

physiology

C

genetics

D

all of these

135

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 137

Which of the following would not be observed in a bacterial cell?

A

DNA

B

cell membrane

C

golgi apparatus

D

ribosomes

136

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 138

Which of the following is an amniote?

A

Leaf green tree frog

B

Japanese giant salamander

C

Crow

D

both a and b

137

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 139

Which of these cycles operate in human females?

A

Oestrous cycle

B

Menstrual cycle

C

both a and b

D

none of these

138

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 140

Which disease is represented by excess MSH secretion?

A

addison's

B

alzheimer's

C

Parkinson's

D

Crohn's

139

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 141

Sperms released in water are carried to the mesenchyme in sponges by?

A

Stipules

B

Spicules

C

Spines

D

Amoeboid cell

140

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 142

Which of the following combination is an example of self replicating organelles?

A Mitochondria and Ribosomes

B Mitochondria and Nucleus

C Mitochondria and Vacuole

D Mitochondria and Chloroplast

141

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 143 Which of the following vitamin acts as a coenzyme

A vitamin b

B vitamin b1

C vitamin b2

D all of these

142

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 144

Which conjugated molecule plays the most significant role in protein expression?

A

glycoproteins

B

glycolipids

C

Nucleohistones

D

DNA

143

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 145

In a dihybrid cross, what fraction of offspring will be homozygous for both traits?

A

$\frac{1}{2}$

B

$\frac{1}{4}$

C

$\frac{1}{8}$

D

$\frac{1}{16}$

144

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 146

The enzyme increases the rate of reaction by which of the following?

A

decreasing kinetic energy

B

decreasing chemical energy

C

decreasing potential energy

D

decreasing activation energy

145

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 147 What does ATP provide during photosynthesis?

A Mechanical energy

B chemical energy

C physical energy

D all of these

146

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 148

Which enzyme is released to dissolve bacterial cell wall by bacteriophages?

A

lysosomes

B

lysozymes

C

ligase

D

both a and b

147

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 149

Enzyme-substrate specificity is a result of which property of enzymes?

A The primary structure of enzymes.

B The secondary structure of enzymes.

C Tertiary structure of enzymes.

D Quaternary structure of enzymes.

148

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 150

A single motor neuron and the muscle fibers it innervates are collectively called a:

A sensory unit

B motor unit

C Both A and B

D Cranial unit

149

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 151 Which of the following statements is true concerning motor units?

- A Motor unit neurons only transmit one action potential during a contraction
- B Large motor units are innervated first in a muscle, followed by smaller units in order to have a smooth contraction
- C The neuron releases epinephrine across the synaptic cleft in order to stimulate an action potential in the sarcolemma
- D Finger muscles are typically composed of smaller motor units

150

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 152

The properties of integral membrane proteins can be studied by?

A

Atomic force microscopy

B

Cryo-sectioning and electron microscopy

C

Freeze-fracture technique and electron microscopy

D

all of these

151

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 153

Human eye muscles contract in:

A

0.01 sec

B

0.05 sec

C

0.08 sec

D

None of these

152

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 154

Which lobe is involved in interpreting pain and touch in the body?

A

Frontal

B

Parietal

C

Temporal

D

Occipital

153

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 155

The total aggregate of genes in a population at any one time is called population's?

A

genome

B

gene pool

C

genetic group

D

genomic library

154

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 156 A group of populations that have the potential to interbreed in nature is known as which of the following?

A genus

B family

C specie

D community

155

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 157

If all members of a population are homozygous for the same allele, that allele is said to be?

A

Mobile in gene pool

B

Random in gene pool

C

Stationary in gene pool

D

Fixed in gene pool

156

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 158

In the intestine, the branches of lymph capillaries, within villi, are called:

A

lacteals

B

lymph

C

lymphatic vessels

D

lymph nodes

157

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 159

Which process can take place in the presence and absence of oxygen?

A

glycolysis

B

pyruvic acid oxidation

C

krebs cycle

D

electron transport chain

158

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 160 Between the seminiferous tubules are interstitial cells which secrete which of the following hormone?

A progesterone

B estrogen

C testosterone

D oxytocin

159

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 161

Closed circulatory system is present in which group of invertebrates?

A Arthropods

B Gastopods

C Aves

D Annelids

160

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 162

Which enzyme is found in saliva?

A

pepsin

B

lipase

C

ptyalin

D

Lactase

161

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 163

What does an icosahedral capsid consists of?

A

Hexagonal capsomeres

B

Pentagonal capsomeres

C

Triangular Capsomeres

D

Both A and B

162

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 164

If the cross-bridges bind to actin, they will pivot in such a way to cause the actin filaments to slide. This pivoting action causes the actin filaments to slide _____.

A closer together

B farther apart

C Towards the Z-line

D Both B and C are correct

163

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 165

In most triploblastic after embryonic development, the three layers are represented as?

A Their functions in the body

B Structures associated with them

C Separate layers of cells

D Structures formed from them

164

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 166

Porcupine is a mammal because:

A The scales on its body are modified as spines for protection against predators.

B It lays eggs and has mammary glands.

C The fur on its body is modified as spines and it is warm-blooded.

D None of the above.

165

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 167

The brain area responsible for screening all incoming sensory data is:

A Hypothalamus

B Thalamus

C cerebellum

D cerebral cortex

166

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 168

Which of the following virus is enveloped?

A

adenovirus

B

herpes virus

C

poliovirus

D

none of these

167

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 169

The process that does not occur during expiration is:

A intercostal muscles are relaxed

B ribs are relaxed

C muscles of diaphragm are relaxed

D Lungs are relaxed

168

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 170

The mechanism of enzyme activation is referred to as?

A

activation energy

B

catalysis

C

enzyme specificity

D

denaturation

169

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 171

The diencephalon comprises of:

A

Pons and medulla

B

Thalamus and limbic system

C

Pons and medulla

D

Hypothalamus and limbic system

170

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 172

Example of a homologous organ is represented best by which of the following?

A Wing of an insect, wing of a bird

B Leg of a dog, leg of a spider

C The arm of a human, wing of a bird

D all of these

171

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 173

Which hormone is produced mainly by corpus luteum in the ovary following ovulation?

A

progesterone

B

FSH

C

LH

D

Chorionic gonadotrophic hormone

172

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 174 A man expresses a certain X-linked recessive genetic disorder. Which of the following must be true?

- A His mother expresses the disorder
- B His father passed on the allele for the disorder
- C His mother passed on the allele for the disorder
- D none of these

173

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 175

Methanopyrus kandleri is an organism which lives in a hydrogen-carbon dioxide environment, and was first discovered in a hydrothermal vent where temperatures reached 230°F. What sort of organism is this?

A protist

B Cyanobacteria

C archaea

D bacteria

174

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Q 176

Example of a homologous organ is represented best by which of the following?

A Wing of an insect, wing of a bird

B Leg of a dog, leg of a spider

C The arm of a human, wing of a bird

D all of these

175

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 177

Growth and development of plant cells is the role of?

A

parenchymatous cells

B

chlorenchymatous cells

C

meristematic cell

D

sclerenchymatous cells

176

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 178

The number of nuclear pores is highly variable in eukaryotic cells because of _____.

A

cell size

B

Number of chromosomes

C

Size of the nucleus

D

Level of gene expression

177

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 179 The point at which there is no net exchange of gases between leaves and atmosphere is known as?

A neutral point

B compensation point

C parallel point

D competitive point

178

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Q 180

Which of the following substance is most favorable to form structural component of biological membranes?

A Hydrophilic Carbohydrates

B Hydrophobic fats

C both a and b

D none of these

179

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of articles and prepositions

Q 181

We will need _____ umbrella today.

A

a

B

an

C

the

D

no article

180

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate control of tenses and sentence structure

Q 182 She thanked me for what I _____.

A have done

B has done

C have been done

D did

181

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of subject-verb agreement

Q 183

No, my family _____ live nearby.

A

does not

B

do

C

do not

D

did

182

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate control of tenses and sentence structure

Q 184 The baby _____ for milk now.

A cry

B cried

C cries

D is crying

183

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate control of tenses and sentence structure

Q 185

By the next month, we shall _____ (have) the project.

A

have

B

have had

C

has

D

having

184

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate control of tenses and sentence structure

Q 186

I have two sisters.

A

Declarative

B

Imperative

C

Interrogative

D

Exclamatory

185

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Comprehend key vocabulary

Q 187 You cannot eat that mango. It is not _____ yet.

A best

B pale

C ripe

D mature

186

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of subject-verb agreement

Q 188

The information provided to you _____ wrong.

A

were

B

was

C

are

D

have been

187

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of articles and prepositions

Q 189

Our neighbors have _____ cat and _____ dog.

A

a...an

B

a...a

C

a...the

D

an...an

188

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of articles and prepositions Demonstrate correct use of subject-verb agreement

Demonstrate correct use of writing conventions of spelling, capitalization and punctuation to clarify meaning

Q 190

Choose the correct sentence.

A He always loved sweets, chocolates, biscuits and cakes.

B He always loved, sweets, chocolates, biscuits and cakes.

C He always loved sweets, chocolates, biscuits and, cakes.

D He always loved sweets, chocolates biscuits and cakes.

189

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of subject-verb agreement

Q 191 Rahul and his friends _____ also invited to the party.

A is

B was

C had

D were

190

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Comprehend key vocabulary

Q 192

She hadn't eaten all day, and by the time she got home she was _____.

A blissful

B ravenous

C full

D filled

191

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of writing conventions of spelling, capitalization and punctuation to clarify meaning

Q 193

Choose the correct spelling of the word

A thout

B thought

C thot

D thouht

192

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of writing conventions of spelling, capitalization and punctuation to clarify meaning

Q 194

should have

A

shouldh've

B

should've

C

shouldv'e

D

should'ave

193

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of writing conventions of spelling, capitalization and punctuation to clarify meaning

Q 195

Choose the correct spelling of the word

A

possession

B

possession

C

posesion

D

posession

194

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of subject-verb agreement

Q 196

Each of the students _____ responsible for doing his or her work

A are

B is

C was

D were

195

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate control of tenses and sentence structure

Q 197 They will bake the pies.Which tense is used here?

A Present

B Past

C Future

D Universal

196

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Comprehend key vocabulary

Q 198

He was dismissed from the service for his insistent

A

alertness

B

nobility

C

disobedience

D

alliance

197

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate control of tenses and sentence structure

Q 199 Which one is correct?

A I watched TV last week.

B I have watch TV last week.

C I watch TV last week.

D I was watched TV last week.

198

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Demonstrate correct use of articles and prepositions

Q 200

Mariam enjoys eating _____ cheese.

A

a

B

an

C

the

D

no article

199

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Essential parts

Q 201 What should come next to it book

A pages

B learning

C pictures

D eraser

200

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Statements and Actions

Q 202

Statement As stated in the recent census report the female to male ratio is alarmingly low. I. The government should conduct another census to verify the results. II. The government should immediately issue orders to all the departments to encourage people to improve the ratio.

A Both of them follows

B None of them follows

C Only I follows

D Only II follows

201

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Dependent Causes/ Independent Causes/

Q 203

Statement: There is sharp decline in the production of oil seeds this year. The government has decided to increase the import quantum of edible oil.

- A Statement I is the cause and statement II is its effect.
- B Statement II is the cause and statement I is its effect
- C Both the statements I and II are independent causes
- D Both the statements I and II are effects of some common cause

202

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Statements and Actions

Q 204

Statement The availability of imported fruits has increased in the indigenous market and so the demand for indigenous fruits has been decreased. I. To help the indigenous producers of fruits, the Government should impose high import duty on these fruits, even if these are not of good quality. II. The fruit vendors should stop selling imported fruits. So that the demand for indigenous fruits would be increased.

A both of them follows

B None of them follows

C Only I follows

D Only II follows

203

SKIPPED QUESTIONS 

< Previous Question

Next Question >

Verbal Classification

Q 205

The term "midnight sun" refers to the time when the sun sets at 12 a.m.

A

A long period of time when the sun shines in the polar circle

B

B a full moon

C

twilight

D

Both A and B

204

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Statement and Argument

Q 206

Statement Should children be prevented completely from watching television? Arguments (I) No. We get vital information regarding education through television. (II) Yes. It hampers the study of children. (III) Yes. Young children are misguided by certain programmes featuring violence

A Only I, II and III are strong

B Only I is strong

C Only I and II are strong

D Only I and II are strong

205

SKIPPED QUESTIONS [< Previous Question](#)[Next Question >](#)

Verbal Classification

Q 207

First cloning in animals was successfully done in

A

Goat

B

Sheep

C

Cow

D

Both A and B

206

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Dependent Causes/ Independent Causes/

Q 208

I. The PIC doctors are on a strike. II. There was a death in PIC as due to non-availability of the doctor for the check-up.

- A Statement I is the cause and statement II is its effect.
- B Statement II is the cause and statement I is its effect.
- C Both statements I and II are independent causes
- D Both statements I and II are the effects of independent cause.

207

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Analogies

Q 209

Aware is to alert as prompt is to

A

Scarcely

B

Impolitely

C

Bragging

D

Quietly

208

SKIPPED QUESTIONS 

 Previous Question

Next Question 

Number series

Q 210

Look at this series 5.2, 4.8, 4.4, 4. What number should come next

A 3

B 3.3

C 3.5

D 3.6

209

SKIPPED QUESTIONS 

 Previous Question

Submit

Q1 Which particle has dual nature?

A photon

B alpha

C electron

D all of these

< Previous Question

Next Question >

Q2 The SI unit of angular acceleration is:

A rad/s^2

B rad/s

C rad.s

D rad.s^2

< Previous Question

Next Question >

Q3 The number of atoms present in a molecule determines its

A shape

B size

C molecularity

D atomicity

< Previous Question

Next Question >

Q4 Porcupine is a mammal because:

A The scales on its body are modified as spines for protection against predators.

B It lays eggs and has mammary glands.

C The fur on its body is modified as spines and it is warm-blooded.

D None of the above.

< Previous Question

Next Question >

Q5 Aware is to alert as prompus is to

A Scarcely

B Impolitely

C Bragging

D Quietly

< Previous Question

Next Question >

Q6

Correct form of ohm's law

A

$$I = VR$$

B

$$V \propto I$$

C

$$V = IR$$

D

Both B and C

< Previous Question

Next Question >

Q7

Resistivity of a wire is ___ ohm-m if 0.75 A current flows through it by applying 1.5 V potential difference, take length and cross section as 5m and $2.5 \times 10^{-7} \text{ m}^2$.

A

 1×10^{-7}

B

 2.63×10^{-8}

C

 19×10^{-8}

D

 7.85×10^{-8}

< Previous Question

Next Question >

Q8

The fate of each blastomere is foretold. What will that cleavage be?

A

Spiral and indeterminate

B

Radial and indeterminate

C

Radial and indeterminate

D

Spiral and determinate

[< Previous Question](#)[Next Question >](#)

Q9

A single motor neuron and the muscle fibers it innervates are collectively called a:

A

sensory unit

B

motor unit

C

Both A and B

D

Cranial unit

[< Previous Question](#)[Next Question >](#)

Q10

The waves which propagate by the oscillation of material particles are called:

A

matter waves

B

mechanical waves

C

electromagnetic waves

D

microwaves

[< Previous Question](#)[Next Question >](#)

Q11

_____ are such nuclei of an element that have the same atomic number Z , but have different mass number A

A

isotopes

B

isobars

C

isomers

D

isotherms

< Previous Question

Next Question >

Q12

What are the units of the ratio: specific latent heat of vaporization of water -----
----- specific heat capacity of water

A K

B 1 ---- K

C k^2

D no unit

[< Previous Question](#)[Next Question >](#)

Q13 The electron volt is the unit of:....

A electric current

B electric potential

C electric energy

D electric flux

< Previous Question

Next Question >

Q14

The process of converting alternating current to direct current is called

A

modulation

B

amplification

C

oscillation

D

rectification

[< Previous Question](#)[Next Question >](#)

Q15 Lorentz force can be represented as

A $q[E + (v \times B)]$

B $q[E + vB \cos\theta]$

C both

D none of these

< Previous Question

Next Question >

Q16 Under the action of the restoring force:

A the speed of the body always increases

B the body moves at constant speed

C the body always slows down

D the body accelerates

< Previous Question

Next Question >

Q17 β - decay means emission of electron from

A radioactive nucleus

B innermost electron orbit

C a stable nucleus

D outer mot electron orbit

< Previous Question

Next Question >

Q18 The mutual induction happens in

A AC generator

B DC generator

C Battery

D Transformer

< Previous Question

Next Question >

Q19

In parallel voltage remains?

A

Same

B

Different

C

Both of them

D

None of them

< Previous Question

Next Question >

Q20 Mass and energy are related to each other by

A Newton's law

B Einstein law

C Coulomb law

D all of these

< Previous Question

Next Question >

Q21

The ratio of the angular speed of the minute hand of a clock to that of its hour hand is

A

3600:1

B

60:1

C

24:1

D

12:1

[< Previous Question](#)[Next Question >](#)

Q22

The output voltage of a rectifier is

A

smooth

B

pulsating

C

perfectly direct

D

alternating

< Previous Question

Next Question >

Q23

220V, 50 Hz AC supply is connected across a resistor of 50 k ohms. The current at time t Seconds, assuming that it is zero at $t = 0$, is

A $4.4 \sin(314t)$ mA

B $4.4 \sin(157t)$ mA

C $6.2 \sin(314t)$ mA

D $6.2 \sin(157t)$ mA

[< Previous Question](#)[Next Question >](#)

Q24 The quarks are fundamental particles

A true in some cases

B only spin up quarks

C only spin down quarks

D FALSE

< Previous Question

Next Question >

Q25

A heat engine performs 100 J of work and at the same time rejects 400 J of heat energy to the cold reservoirs. What is the efficiency of the engine?

A

20%

B

25%

C

4%

D

50 %

< Previous Question

Next Question >

Q26 Find the magnetic force when a charge 3.5C with flux density of 4 units is having a velocity of 2m/s

A 14

B 28

C 7

D 32

< Previous Question

Next Question >

Q27

Radiation exchange occurs in which medium

A

solid

B

liquid

C

gas

D

vacuum

< Previous Question

Next Question >

Q28 Which of the following substances cannot be emitted by radioactive substances during their decay?

A proton

B neutrinos

C helium nuclei

D electrons

< Previous Question

Next Question >

Q29

Consider a displacement-time graph of an object moving along x-axis. Then negative gradient of the graph represents:...

A

velocity in x-direction

B

velocity in negative x-direction

C

acceleration in x-direction

D

acceleration in negative x-direction

[< Previous Question](#)[Next Question >](#)

Q30 As a result of interference, energy

A is transmitted and reflected

B is lost

C remains unchanged as a whole but is redistributed

D is gained

< Previous Question

Next Question >

Q31 The SI unit of angular momentum is Js. It can also be expressed as:

A kg ms^{-1}

B $\text{kgm}^2\text{s}^{-1}$

C $\text{kgm}^2\text{s}^{-2}$

D $\text{kgm}^{-2}\text{s}^{-1}$

< Previous Question

Next Question >

Q32

The electric potential at a point in an electric field can be defined as:...

A

work done in bringing a unit positive charge from infinity to that point

B

work done in bringing a unit positive charge from infinity to that point while keeping the charge in equilibrium.

C

work done in bringing a unit negative charge from infinity to that point while keeping the charge in equilibrium.

D

work done in bringing a unit negative charge from infinity to that point

[< Previous Question](#)[Next Question >](#)

Q33 The convection process transfer heat faster than radiation

A it depends on condition

B not always

C TRUE

D FALSE

< Previous Question

Next Question >

Q34 In step up transformer _____ is increased in secondary coils

A electric field

B magnetic field

C number of turns

D none of these

< Previous Question

Next Question >

Q35

A force of $F = 20 + 10y$ N is acting in y direction, work done by this force to move the particle from $y = 0$ to $y = 1$ m

A 20 J

B 15 J

C 5 J

D 25 J

[< Previous Question](#)[Next Question >](#)

Q36 A full wave rectifier passes _____ into positive cycles

A lower half cycle

B upper half cycle

C both cycles

D none of them

< Previous Question

Next Question >

Q37

Why should a resistance be introduced in a circuit in series deliberately?

A

To increase current

B

To decrease current

C

To control current

D

Just to give a good look to the circuit

[< Previous Question](#)[Next Question >](#)

Q38

A charge is moving with velocity v , it enters a uniform electric field E . The direction of v and E are not parallel. What is the path of the charge particle inside the electric field?

A parabolic

B circular

C parallel to v

D parallel to E

[< Previous Question](#)[Next Question >](#)

Q39 Which principle is used in solar cells?

A momentum

B charge

C mass

D all of these

< Previous Question

Next Question >

Q40 If one body is at rest then if we try to move it then it will resist by

A inertia of motion

B inertia of rest

C inertia of turning

D inertia of acceleration

< Previous Question

Next Question >

Q41 Force on a moving charge in a uniform magnetic field will be maximum, when angle between v and B is

A 0

B 30

C 60

D 90

< Previous Question

Next Question >

Q42

In a bridge type full wave rectifier, if V_m is the peak voltage across the secondary of the transformer, the maximum voltage coming across each reverse biased diode is

A V_m

B $V_m/\sqrt{2}$

C $2V_m$

D $V_m/3$

[< Previous Question](#)[Next Question >](#)

Q43

Which light photon has the least momentum

A

red

B

green

C

yellow

D

blue

< Previous Question

Next Question >

Q44

How many curies are there in 10^{10} Bq?

A

0.17 Ci

B

0.37 Ci

C

0.27 Ci

D

0.7 Ci

< Previous Question

Next Question >

Q45 The insulation between sheets of transformer core is to get small

A hysteresis loop

B eddy current

C both

D none of these

< Previous Question

Next Question >

Q46 The speed of waves depends upon the:

A tension of the string

B tension and mass per unit length of the string

C diameter of the string

D mass per unit length of the string

< Previous Question

Next Question >

Q47

Superposition of two waves having slightly different frequency, same amplitude and travelling in the same direction, is called:

A interference

B diffraction

C beats

D stationary waves

< Previous Question

Next Question >

Q48

The K.E. of a body of mass 2kg and momentum of 2Ns is :

A

1J

B

2J

C

3J

D

4J

< Previous Question

Next Question >

Q49 _____ time is required for all the atoms to decay

A finite

B infinite

C very short

D zero

< Previous Question

Next Question >

Q50

4000 Coulomb charges were passing from the wire for about 12 seconds. Estimate the current during this process?

A

333.3 ampere

B

333.33 volts

C

666.67 ampere

D

None of them

< Previous Question

Next Question >

Q51 Motional emf can be produced with

A changing magnetic field in space

B Changing magnetic field in time

C Changing flux with space

D Constant magnetic field

< Previous Question

Next Question >

Q52

Consider two capacitors with capacitance $2\mu\text{F}$ and $4\mu\text{F}$. With which type of connection will the $4\mu\text{F}$ capacitor have a greater amount of stored energy than the $2\mu\text{F}$ capacitor?

A series

B parallel

C either series nor parallel

D neither series nor parallel

[< Previous Question](#)[Next Question >](#)

Q53

A heater is used for 5 minutes to heat 500 g of water from 20°C to 50°C. What is the power of heater? Specific heat capacity of water is 4.2 J/g°C.

A

1260 W

B

12.6 kW

C

210 kW

D

12.6 W

< Previous Question

Next Question >

Q54

Radioactive material decays by simultaneous emission of two particles with respective half-lives 1620 and 810 years. The time, in years, after which one-fourth of the material remains?

A

1080

B

2430

C

3240

D

4860

< Previous Question

Next Question >

Q55

A particle of mass 10 kg is moving with velocity $10(x)^{1/2}$, here x is displacement. The work done by net force during the displacement of particle from $x=4$ to $x=9$

A 1250 J

B 1000J

C 3500J

D 2500 J

[< Previous Question](#)[Next Question >](#)

Q56

For a linear relationship between displacement and time we get d-t graph as

A

straight line passing through origin

B

straight line parallel to t- axis

C

quadratic relationship

D

cubic relationship

[< Previous Question](#)[Next Question >](#)

Q57

A stationary wave is formed in a pipe which is open at one end. If two complete loops are formed and the wavelength of the wave is 10 cm, what is the length of the pipe?

A 10 cm

B 15 cm

C 12.5 cm

D 7.5 cm

[< Previous Question](#)[Next Question >](#)

Q58

The control rods in nuclear reactor controls the reaction by

A

reducing the neutron speed

B

increasing the neutrons speed

C

increasing the electron speed

D

decreasing the electron speed

[< Previous Question](#)[Next Question >](#)

Q59

e/m ratio for a electron in electric and magnetic field is

A

$$e/m = B^2 r/E$$

B

$$E/(B^2 r)$$

C

$$E^2/rB^2$$

D

$$B^2/Er$$

< Previous Question

Next Question >

Q60

The radius of Bohr's atom depends on the following

A

 $1/n$

B

 n^2

C

 $1/n^2$

D

 n

< Previous Question

Next Question >

Q61 What is the S.I. unit of pressure?

A Nm^{-2}

B Nm^2

C mm of Hg

D atm

< Previous Question

Next Question >

Q62

Compounds attracted by applied strong magnetic field are called

A

Diamagnetic

B

Paramagnetic

C

Good conductor

D

Ferromagnetic

[< Previous Question](#)[Next Question >](#)

Q63

Which of the carboxylic acid in diluted form is used as vinegar?

A

Formic acid

B

acetic acid

C

benzoic acid

D

amino acid

[< Previous Question](#)[Next Question >](#)

Q64 Give IUPAC name of following compound Tert-Butanol

A 3 - methyl-2-propanol

B 3-methyl-1-propanol

C 2-hydroxy-1-propanol

D 2-methyl-2-propanol

< Previous Question

Next Question >

Q65 Which type of organic compounds are present in natural gas?

A High molecular mass

B Low molecular mass

C Low boiling point

D Both b and c

< Previous Question

Next Question >

Q66 The group which leaves from the substrate in a nucleophilic substitution reaction is called as ____?

A Leaving group

B Electrophile

C Substrate

D Weak nucleophile

< Previous Question

Next Question >

Q67 A reaction with a tendency of occurring in forward and backward direction simultaneously is termed as

A Irreversible

B Unidirectional

C Multidirectional

D Reversible

< Previous Question

Next Question >

Q68

Which of the following forces have no relation with valence electrons?

A

Ionic Bond

B

Chemical bond

C

Intermolecular forces

D

Intramolecular forces

[< Previous Question](#)[Next Question >](#)

Q69 Specific Rate constant is also known as

A Time Constant

B relative rate constant

C Instantaneous rate constant

D velocity constant

< Previous Question

Next Question >

Q70

The turbid liquid were also called liquid crystals due to presence of some degree of

A

heat

B

order

C

hotness

D

coldness

[< Previous Question](#)[Next Question >](#)

Q71 In aldol condensation, nucleophile is _____?

A Hydroxyl ion

B Carbocation

C Carbanion

D Water

< Previous Question

Next Question >

Q72 Which one of the following is not the property of a system?

A Enthalpy

B Internal energy

C Thermal energy

D Temperature

< Previous Question

Next Question >

Q73

Each electron in an atom must have its own unique set of quantum number is a statement of ____

A Aufbau principle

B Pauli exclusion principle

C Hund's rule

D none of these

< Previous Question

Next Question >

Q74 cooling is caused by

A vapor pressure

B evaporation

C freezing

D none of these

< Previous Question

Next Question >

Q75

Law of conservation of energy is actually

A

Second law of thermodynamics

B

Third Law of Thermodynamics

C

First Law of Thermodynamics

D

Zeroth law of Thermodynamics

< Previous Question

Next Question >

Q76

Chloride Ion in NaCl are placed at the corner of regular

A

Pentagon

B

Cuboid

C

Octahedron

D

Cube

[< Previous Question](#)[Next Question >](#)

Q77

Physical methods of finding the rate of reaction always involve

A

A catalyst

B

A graph

C

A calculating software

D

None of These

[< Previous Question](#)[Next Question >](#)

Q78

In a carboxylic acid dimer, how many oxygens are present in the ring?

A

4

B

2

C

3

D

5

< Previous Question

Next Question >

Q79

The specie which is in search of Positive charge is called as _____?

A

Electrophile

B

Nucleophilic

C

Nucleophile

D

Cation

[< Previous Question](#)[Next Question >](#)

Q80

Regular coiling & twisting of polypeptide chain caused by H-bonding in between NH & CO occurs in _____

A Primary structure

B Secondary structure

C Tertiary structure

D Quaternary structure

< Previous Question

Next Question >

Q81 In Electrochemical Cells Reduction takes place at

A Anode

B Cathode

C At the surface of electrolyte

D None of these

< Previous Question

Next Question >

Q82

If Ammonia is not withdrawn continuously from equilibrium mixture its yield will be

A

increased

B

decreased

C

remain unchanged

D

None of these

[< Previous Question](#)[Next Question >](#)

Q83

There is one lone pair present in H_3O^+ , it cannot act as _____?

A

Electrophile

B

Lewis acid

C

Nucleophile

D

Strong acid

[< Previous Question](#)[Next Question >](#)

Q84 Redox Reaction are actually transfer of

A Electrons

B Charges

C Energy

D Hydrogen Ions

< Previous Question

Next Question >

Q85

Which of the following is called as refined form of mineral oil?

A

Coal tar

B

Petroleum

C

Crude oil

D

Kerosine oil

[< Previous Question](#)[Next Question >](#)

Q86

The rate of reaction for the hydrolysis of ester is

A

High

B

Low

C

Moderate

D

Zero

< Previous Question

Next Question >

Q87

Which of the following derivative of carboxylic acid is used as flavoring agent ?

A

Acid halides

B

Acid carbonyls

C

Esters

D

Acid amides

[< Previous Question](#)[Next Question >](#)

Q88

When we react an active metal like Al with less active element like Cu ,it will form

A

Dry cell

B

Galvanic cell

C

Electrolytic cell

D

A and B

[< Previous Question](#)[Next Question >](#)

Q89

Which one of the following substances conduct electricity by the movement of ions?

A

Graphite

B

Copper

C

Molten sodium chloride

D

Mercury

[< Previous Question](#)[Next Question >](#)

Q90

In acid catalyzed nucleophilic addition reactions, which of the following property of carbonyl system enhance ?

A

Electrophilicity

B

Nucleophilicity

C

Basicity

D

Acidity

< Previous Question

Next Question >

Q91 Acetic acid can be used in_____?

A In synthesizing pickles

B In paints

C In pesticides

D all of these

< Previous Question

Next Question >

Q92 Shielding Effect increases_____?

A Down the Group

B Along period

C Diagonally

D only along d -block

< Previous Question

Next Question >

Q93

Temperature and volume in an experiment are part of

A

Surroundings

B

System

C

State of a system

D

All of these

< Previous Question

Next Question >

Q94

Metals have ionization energy value

A

Low

B

high

C

intermediate

D

neutral

< Previous Question

Next Question >

Q95

For the study of particles, discharge tube is filled with

A

gas

B

air

C

vapours of a substance

D

all of these

[< Previous Question](#)[Next Question >](#)

Q96

Which of the following product is obtained from the Chlorination of acetylene?

A

1,2,3,4-tetrachloroethylene

B

1,1,2,2-tetrachloroethylene

C

1,1,2,2-Tetrachloroethane

D

1,2,3,4-Tetrachloroethylene

[< Previous Question](#)[Next Question >](#)

Q97

What is IUPAC name of isopropyl alcohol

A

2 - propanol

B

1 - propanol

C

2 - ethanol

D

2 - propane-1-ol

< Previous Question

Next Question >

Q98

Which of the following is directional bond?

A

Ionic bond

B

Metallic bond

C

H-bond

D

None of these

< Previous Question

Next Question >

Q99

In sp^2 hybridization the orbital orientation is:

A

 109.5°

B

 180°

C

 90°

D

 120°

< Previous Question

Next Question >

Q100

Quantum number values for 2p orbitals are

A

 $n = 2, l = 1$

B

 $n = 1, l = 2$

C

 $n = 1, l =$

D

 $n = 2, l =$

< Previous Question

Next Question >

Q101

Which of the following is succinic acid ?

A

Ethanoic acid

B

Hexanedioic acid

C

Butanedioic acid

D

Propanoic acid

< Previous Question

Next Question >

Q102

What is the value of universal gas constant in S.I. units?

A

 $8.314 \text{ J mol}^{-1} \text{ K}^{-1}$

B

 $8.314 \text{ dm}^3 \text{ atm mol}^{-1} \text{ K}^{-1}$

C

 $0.0821 \text{ dm}^3 \text{ atm mol}^{-1} \text{ K}^{-1}$

D

 $0.0821 \text{ J mol}^{-1} \text{ K}^{-1}$

< Previous Question

Next Question >

Q103

The element caesium bears resemblance with

A

Ca

B

Cr

C

Both of the above

D

None of the above

< Previous Question

Next Question >

Q104

Which of the following has more evaporation rate at same temperature?

A

Gasoline

B

Water

C

Honey

D

Ethanol

[< Previous Question](#)[Next Question >](#)

Q105 What is the value of enthalpy of neutralization when one mole of base reacts with one mole of acid?

A - 60.5 kJ/mol

B -46.5kJ/mol

C -70.5 kJ/mol

D -57.4kJ/mol

< Previous Question

Next Question >

Q106

In organic chemistry, we deal with

A carbon

B Hydrogen

C Hydrocarbons

D potassium

< Previous Question

Next Question >

Q107

The catalyst in the formation of ester from alcohol and a weak acid is

A

A base

B

Palladium

C

Nickel

D

A mineral Acid

[< Previous Question](#)[Next Question >](#)

Q108

The _study of composition of pure substance in 17th century clearly shows that few elements are components of many substances

A qualitative

B quantitative

C both A & B

D extensive

< Previous Question

Next Question >

Q109

The word Archaeobacteria is derived from a Greek word which means?

A

true bacteria

B

ancient bacteria

C

false bacteria

D

both a and b

[< Previous Question](#)[Next Question >](#)

Q110

The lock and key model of enzyme action was proposed by:

A

Louis Pasteur

B

Emil Fischer

C

Daniel Koshland

D

Urey Miller

[< Previous Question](#)[Next Question >](#)

Q111 When cocaine is used as a stimulant, it interferes with the CNS at the reuptake of which hormone?

A testosterone

B dopamine

C serotonin

D adrenaline

< Previous Question

Next Question >

Q112 Bond specificity of an enzyme is also known as?

A relative specificity

B size specificity

C group specificity

D none of these

< Previous Question

Next Question >

Q113

Which of the following statement is incorrect about Glyoxysomes?

- A They contain enzymes which help in conversion of fatty acids into carbohydrate
- B They are abundant in soybeans but absent in pea.
- C They are single membranous organelles
- D They are present throughout life of a plant and provide them with energy through Glyoxylate cycle.

[< Previous Question](#)[Next Question >](#)

Q114

The phage that is involved in the lysogenic cycle of a bacteriophage is known as?

A

Lytic Phage

B

Lysogenic phage

C

Prophage

D

Bacteriophage

[< Previous Question](#)[Next Question >](#)

Q115

Genetic diversity indicates which of the following?

A

large gene pool

B

small gene pool

C

moderate gene pool

D

no gene pool

< Previous Question

Next Question >

Q116

Which of the the following which one is non-cellular in most cases in animals?

A Chlorenchyma

B Mesoderm

C Sclerenchyma

D Mesenchyme

< Previous Question

Next Question >

Q117

In all plants the major sites of photosynthesis are?

A

Leaf

B

Stems

C

Roots

D

Branches

< Previous Question

Next Question >

Q118

If an individual does not reproduce then it's degree of fitness is?

A 100

B 50

C 40

D 0

[< Previous Question](#)[Next Question >](#)

Q119 Which of these is not involved in respiration?

A lungs

B trachea

C glucagon

D bronchi

< Previous Question

Next Question >

Q120

The inflammation of bronchi or bronchioles is known as

A

emphysema

B

asthma

C

pneumonia

D

bronchitis

[< Previous Question](#)[Next Question >](#)

Q121

Urethra and vagina have -----openings to the exterior:

A

common

B

independent

C

Both A and B

D

None of these

[< Previous Question](#)[Next Question >](#)

Q122

Which of the light is mainly absorbed by the plants?

A

Orange

B

Red

C

Green

D

Both A and B

[< Previous Question](#)[Next Question >](#)

Q123

The term that should be last in the reflex sequence is:

A

Receptor

B

Effector

C

Sensory neuron

D

Motor neuron

[< Previous Question](#)[Next Question >](#)

Q124

What is Hepatitis D also known as?

A

Serum hepatitis

B

Infectious hepatitis

C

Bacterial hepatitis

D

Delta hepatitis

< Previous Question

Next Question >

Q125

The neurons that interpret and receive information and stimulate motor neurons are what type of neurons?

A sensory neurons

B motor neurons

C interneurons

D rotator neurons

[< Previous Question](#)[Next Question >](#)

Q126

Which type of bacterial genetic recombination involves the use of a viral vector?

A

transduction

B

transformation

C

binary fission

D

conjugation

[< Previous Question](#)[Next Question >](#)

Q127

A fluid in transit between interstitial fluid and the blood is:

A

Synovial fluid

B

Semen

C

Amniotic fluid

D

Lymph

[< Previous Question](#)[Next Question >](#)

Q128

Which of the following is not a tenet of the Cell Theory?

A Cells carry genetic information in the form of DNA

B Cells are the basic functional unit of life

C Cells arise from pre-existing cells

D All cells have membrane-bound organelles

< Previous Question

Next Question >

Q129 Phenotype represents which of the following?

A morphology

B physiology

C genetics

D all of these

< Previous Question

Next Question >

Q130

Which of the following would not be observed in a bacterial cell?

A

DNA

B

cell membrane

C

golgi apparatus

D

ribosomes

[< Previous Question](#)[Next Question >](#)

Q131 Which of the following is an amniote?

A Leaf green tree frog

B Japanese giant salamander

C Crow

D both a and b

< Previous Question

Next Question >

Q132

Which of these cycles operate in human females?

A

Oestrous cycle

B

Menstrual cycle

C

both a and b

D

none of these

[< Previous Question](#)[Next Question >](#)

Q133

Which disease is represented by excess MSH secretion?

A

addison's

B

alzheimer's

C

Parkinson's

D

Crohn's

[< Previous Question](#)[Next Question >](#)

Q134

Example of a homologous organ is represented best by which of the following?

A Wing of an insect, wing of a bird

B Leg of a dog, leg of a spider

C The arm of a human, wing of a bird

D all of these

[< Previous Question](#)[Next Question >](#)

Q135

Which of the following vitamin acts as a coenzyme

A

vitamin b

B

vitamin b1

C

vitamin b2

D

all of these

[< Previous Question](#)[Next Question >](#)

Q136

Which conjugated molecule plays the most significant role in protein expression?

A glycoproteins

B glycolipids

C Nucleohistones

D DNA

< Previous Question

Next Question >

Q137

In a dihybrid cross, what fraction of offspring will be homozygous for both traits?

A

 $1/2$

B

 $1/4$

C

 $1/8$

D

 $1/16$

< Previous Question

Next Question >

Q138

The enzyme increases the rate of reaction by which of the following?

- A decreasing kinetic energy
- B decreasing chemical energy
- C decreasing potential energy
- D decreasing activation energy

< Previous Question

Next Question >

Q139

What does ATP provide during photosynthesis?

A Mechanical energy

B chemical energy

C physical energy

D all of these

[< Previous Question](#)[Next Question >](#)

Q140

Which enzyme is released to dissolve bacterial cell wall by bacteriophages?

A

lysosomes

B

lysozymes

C

ligase

D

both a and b

[< Previous Question](#)[Next Question >](#)

Q141

Enzyme-substrate specificity is a result of which property of enzymes?

A The primary structure of enzymes.

B The secondary structure of enzymes.

C Tertiary structure of enzymes.

D Quaternary structure of enzymes.

[< Previous Question](#)[Next Question >](#)

Q142

Which of the following statements is true concerning motor units?

A

Motor unit neurons only transmit one action potential during a contraction

B

Large motor units are innervated first in a muscle, followed by smaller units in order to have a smooth contraction

C

The neuron releases epinephrine across the synaptic cleft in order to stimulate an action potential in the sarcolemma

D

Finger muscles are typically composed of smaller motor units

[< Previous Question](#)[Next Question >](#)

Q143

The properties of integral membrane proteins can be studied by?

A

Atomic force microscopy

B

Cryo-sectioning and electron microscopy

C

Freeze-fracture technique and electron microscopy

D

all of these

[< Previous Question](#)[Next Question >](#)

Q144

Human eye muscles contract in:

A

0.01 sec

B

0.05 sec

C

0.08 sec

D

None of these

< Previous Question

Next Question >

Q145

Which lobe is involved in interpreting pain and touch in the body?

A

Frontal

B

Parietal

C

Temporal

D

Occipital

[< Previous Question](#)[Next Question >](#)

Q146

The total aggregate of genes in a population at any one time is called population's?

A

genome

B

gene pool

C

genetic group

D

genomic library

[< Previous Question](#)[Next Question >](#)

Q147 A group of populations that have the potential to interbreed in nature is known as which of the following?

A genus

B family

C specie

D community

< Previous Question

Next Question >

Q148

If all members of a population are homozygous for the same allele, that allele is said to be?

A Mobile in gene pool

B Random in gene pool

C Stationary in gene pool

D Fixed in gene pool

< Previous Question

Next Question >

Q149

In the intestine, the branches of lymph capillaries, within villi, are called:

A

lacteals

B

lymph

C

lymphatic vessels

D

lymph nodes

[< Previous Question](#)[Next Question >](#)

Q150 Between the seminiferous tubules are interstitial cells which secrete which of the following hormone?

A progesterone

B estrogen

C testosterone

D oxytocin

< Previous Question

Next Question >

Q151

Closed circulatory system is present in which group of invertebrates?

A Arthropods

B Gastopods

C Aves

D Annelids

< Previous Question

Next Question >

Q152

Which enzyme is found in saliva?

A

pepsin

B

lipase

C

ptyalin

D

Lactase

< Previous Question

Next Question >

Q153

What does an icosahedral capsid consists of?

A

Hexagonal capsomeres

B

Pentagonal capsomeres

C

Triangular Capsomeres

D

Both A and B

< Previous Question

Next Question >

Q154

If the cross-bridges bind to actin, they will pivot in such a way to cause the actin filaments to slide. This pivoting action causes the actin filaments to slide _____.

A closer together

B farther apart

C Towards the Z-line

D Both B and C are correct

[< Previous Question](#)[Next Question >](#)

Q155

In most triploblastic after embryonic development, the three layers are represented as?

A Their functions in the body

B Structures associated with them

C Separate layers of cells

D Structures formed from them

[< Previous Question](#)[Next Question >](#)

Q156

The brain area responsible for screening all incoming sensory data is:

A

Hypothalamus

B

Thalamus

C

cerebellum

D

cerebral cortex

[< Previous Question](#)[Next Question >](#)

Q157

Which of the following virus is enveloped?

A

adenovirus

B

herpes virus

C

poliovirus

D

none of these

< Previous Question

Next Question >

Q158

The process that does not occur during expiration is:

A intercostal muscles are relaxed

B ribs are relaxed

C muscles of diaphragm are relaxed

D Lungs are relaxed

[< Previous Question](#)[Next Question >](#)

Q159

The mechanism of enzyme activation is referred to as?

A

activation energy

B

catalysis

C

enzyme specificity

D

denaturation

[< Previous Question](#)[Next Question >](#)

Q160

The diencephalon comprises of:

A

Pons and medulla

B

Thalamus and limbic system

C

Pons and medulla

D

Hypothalamus and limbic system

< Previous Question

Next Question >

Q161

Which hormone is produced mainly by corpus luteum in the ovary following ovulation?

A

progesterone

B

FSH

C

LH

D

Chorionic gonadotrophic hormone

[< Previous Question](#)[Next Question >](#)

Q162 A man expresses a certain X-linked recessive genetic disorder. Which of the following must be true?

- A His mother expresses the disorder
- B His father passed on the allele for the disorder
- C His mother passed on the allele for the disorder
- D none of these

Q163

Growth and development of plant cells is the role of?

A

parenchymatous cells

B

chlorenchymatous cells

C

meristematic cell

D

sclerenchymatous cells

[< Previous Question](#)[Next Question >](#)

Q164

The number of nuclear pores is highly variable in eukaryotic cells because of _____.

A

cell size

B

Number of chromosomes

C

Size of the nucleus

D

Level of gene expression

[< Previous Question](#)[Next Question >](#)

Q165 The point at which there is no net exchange of gases between leaves and atmosphere is known as?

A neutral point

B compensation point

C parallel point

D competitive point

< Previous Question

Next Question >

Q166

Which of the following substance is most favorable to form structural component of biological membranes?

A Hydrophilic Carbohydrates

B Hydrophobic fats

C both a and b

D none of these

[< Previous Question](#)[Next Question >](#)

Q167

We will need _____ umbrella today.

A

a

B

an

C

the

D

no article

< Previous Question

Next Question >

Q168

She thanked me for what I _____.

A

have done

B

has done

C

have been done

D

did

< Previous Question

Next Question >

Q169

No, my family _____ live nearby.

A

does not

B

do

C

do not

D

did

< Previous Question

Next Question >

Q170

By the next month, we shall _____ (have) the project.

A

have

B

have had

C

has

D

having

[< Previous Question](#)[Next Question >](#)

Q171

I have two sisters.

A

Declarative

B

Imperative

C

Interrogative

D

Exclamatory

< Previous Question

Next Question >

Q172

You cannot eat that mango. It is not _____ yet.

A best

B pale

C ripe

D mature

[< Previous Question](#)[Next Question >](#)

Q173

The information provided to you _____ wrong.

A

were

B

was

C

are

D

have been

[< Previous Question](#)[Next Question >](#)

Q174

Our neighbors have _____ cat and _____ dog.

A

a... an

B

a...a

C

a...the

D

an...an

[< Previous Question](#)[Next Question >](#)

Q175

Choose the correct sentence.

A

He always loved sweets, chocolates, biscuits and cakes.

B

He always loved, sweets, chocolates, biscuits and cakes.

C

He always loved sweets, chocolates, biscuits and, cakes.

D

He always loved sweets, chocolates biscuits and cakes.

< Previous Question

Next Question >

Q176

Rahul and his friends _____ also invited to the party.

A

is

B

was

C

had

D

were

< Previous Question

Next Question >

Q177

Choose the correct spelling of the word

A

thout

B

thought

C

thot

D

thouht

< Previous Question

Next Question >

Q178

should have

A

shouldh've

B

should've

C

shouldv'e

D

should'ave

< Previous Question

Next Question >

Q179

Choose the correct spelling of the word

A

possession

B

possession

C

posesion

D

posession

< Previous Question

Next Question >

Q180

Each of the students _____ responsible for doing his or her work

A

are

B

is

C

was

D

were

< Previous Question

Next Question >

Q181 They will bake the pies.Which tense is used here?

A Present

B Past

C Future

D Universal

< Previous Question

Next Question >

Q182

He was dismissed from the service for his insistent

A

alertness

B

nobility

C

disobedience

D

alliance

< Previous Question

Next Question >

Q183

Which one is correct?

A

I watched TV last week.

B

I have watch TV last week.

C

I watch TV last week.

D

I was watched TV last week.

< Previous Question

Next Question >

Q184

What should come next to it book

A

pages

B

learning

C

pictures

D

eraser

< Previous Question

Next Question >

Q185

Statement As stated in the recent census report the female to male ratio is alarmingly low. I. The government should conduct another census to verify the results. II. The government should immediately issue orders to all the departments to encourage people to improve the ratio.

A Both of them follows

B None of them follows

C Only I follows

D Only II follows

[< Previous Question](#)[Next Question >](#)

Q186

Statement: There is sharp decline in the production of oil seeds this year. The government has decided to increase the import quantum of edible oil.

A

Statement I is the cause and statement II is its effect.

B

Statement II is the cause and statement I is its effect

C

Both the statements I and II are independent causes

D

Both the statements I and II are effects of some common cause

[< Previous Question](#)[Next Question >](#)

Q187

Statement The availability of imported fruits has increased in the indigenous market and so the demand for indigenous fruits has been decreased. I. To help the indigenous producers of fruits, the Government should impose high import duty on these fruits, even if these are not of good quality. II. The fruit vendors should stop selling imported fruits. So that the demand for indigenous fruits would be increased.

A both of them follows

B None of them follows

C Only I follows

D Only II follows

[< Previous Question](#)[Next Question >](#)

Q188

The term "midnight sun" refers to the time when the sun sets at 12 a.m.

A

A long period of time when the sun shines in the polar circle

B

B a full moon

C

twilight

D

Both A and B

[< Previous Question](#)[Next Question >](#)

Q189

Statement Should children be prevented completely from watching television? Arguments (I) No. We get vital information regarding education through television. (II) Yes. It hampers the study of children. (III) Yes. Young children are misguided by certain programmes featuring violence

A Only I, II and III are strong

B Only I is strong

C Only I and II are strong

D Only I and II are strong

[< Previous Question](#)[Next Question >](#)

Q190

First cloning in animals was successfully done in

A

Goat

B

Sheep

C

Cow

D

Both A and B

< Previous Question

Next Question >

Q191

I. The PIC doctors are on a strike. II. There was a death in PIC as due to non-availability of the doctor for the check-up.

A Statement I is the cause and statement II is its effect.

B Statement II is the cause and statement I is its effect.

C Both statements I and II are independent causes

D Both statements I and II are the effects of independent cause.

[< Previous Question](#)[Next Question >](#)

Q192

Look at this series 5.2, 4.8, 4.4, 4. What number should come next

A

3

B

3.3

C

3.5

D

3.6

< Previous Question

Next Question >

Q193

She hadn't eaten all day, and by the time she got home she was _____.

A

blissful

B

ravenous

C

full

D

filled

< Previous Question

Next Question >

Q194

The covalent radius of an element is __ of the single bond length b/w two similar atoms covalently bonded in a molecule

A one third

B one fourth

C half

D quarter

[< Previous Question](#)[Next Question >](#)

Q195

What energy rich organic compound is produced as a result of the Calvin cycle?

A NADPH

B CO₂

C ATP

D glucose

< Previous Question

Next Question >

Q196

Sperms released in water are carried to the mesenchyme in sponges by?

A

Stipules

B

Spicules

C

Spines

D

Amoeboid cell

[< Previous Question](#)[Next Question >](#)

Q197 The baby _____ for milk now.

A cry

B cried

C cries

D is crying

< Previous Question

Next Question >

Q198

In Al_2S_3 , the valency of Al is

A

2

B

3

C

-3

D

-2

< Previous Question

Next Question >

Q199

It consist of discrete molecules

A

sodium chloride

B

dry ice

C

copper

D

 CaCl_2

< Previous Question

Next Question >

Q200

In one second if the concentration changes from 0.1 to 0.25 then the rate will be

A

0.02 Moles/dm³s⁻¹

B

0.03 Moles/dm³s⁻¹

C

0.15 Moles/dm³s⁻¹

D

0.11 Moles/dm³s⁻¹

[< Previous Question](#)[Next Question >](#)

Q201

Methanopyrus kandleri is an organism which lives in a hydrogen-carbon dioxide environment, and was first discovered in a hydrothermal vent where temperatures reached 230°F. What sort of organism is this?

A protist

B Cyanobacteria

C archaea

D bacteria

[< Previous Question](#)[Next Question >](#)

Q202

Resistivity of a conductor depends upon

A

temperature

B

length

C

cross sectional area

D

None of these

< Previous Question

Next Question >

Q203

According to Le chatelier's Principle Exothermic reactions are favored by

A Increase in Pressure

B Increase in Volume

C decrease in Temperature

D All of these

< Previous Question

Next Question >

Q204

A wave is produced by

A

Disturbance

B

Heating

C

Freezing

D

Clapping

< Previous Question

Next Question >

Q205

The concept of _____ of gases helps to relate solids and liquids in a quantitative manner.

A density

B molar volume

C pressure

D temperature

[< Previous Question](#)[Next Question >](#)

Q206

Centrioles are composed of how many triplets of microtubules?

A

6

B

9

C

12

D

15

< Previous Question

Next Question >

Q207

Mariam enjoys eating _____ cheese.

A

a

B

an

C

the

D

no article

< Previous Question

Next Question >

Q208

Which of the following combination is an example of self replicating organelles?

A Mitochondria and Ribosomes

B Mitochondria and Nucleus

C Mitochondria and Vacuole

D Mitochondria and Chloroplast

< Previous Question

Next Question >

Q209

Which process can take place in the presence and absence of oxygen?

A

glycolysis

B

pyruvic acid oxidation

C

krebs cycle

D

electron transport chain

[< Previous Question](#)[Next Question >](#)

Q210

Example of a homologous organ is represented best by which of the following?

A Wing of an insect, wing of a bird

B Leg of a dog, leg of a spider

C The arm of a human, wing of a bird

D all of these

[< Previous Question](#)[Next Question >](#)